

A Research on Potential Land-Deprived Peasants' Intention on the Old-Age Care Issue in the Urban Planning Area: A Case Study Based on 53 Peasant Groups in Daxing Town of Ya'an City

Wei Shui

Department of Eco-agriculture and Regional Development & Center for Rural Planning and Research
Sichuan Agricultural University, Chengdu Sichuan 611130, China

Wanfu Zhao

Department of Eco-agriculture and Regional Development
Sichuan Agricultural University, Chengdu Sichuan 611130, China

Received: October 26, 2011 Accepted: November 10, 2011 Published: March 1, 2012

doi:10.5539/jgg.v4n1p196 URL: <http://dx.doi.org/10.5539/jgg.v4n1p196>

Abstract

With the speedy development of urbanization in China, most of people in China, including some of developed countries, have increasingly and closely concerned about the old-age care issue of the potential land-deprived peasants in urban planning area of China. By analyzing the peasants' questionnaires, the paper focused on the old-age care issue of potential land-deprived peasants and formed the conclusions and offered some suggestions on the urban planning, urban construction, urban management and the aftercare of land-deprived peasants. The investigations about the potential land-deprived peasants' intention on the old-age care issue were carried out by means of 101 households' sampling survey in 53 peasant groups of 8 villages of Ya'an city. Though the statistics analysis of SPSS software, results indicated that the traditional old-age care ways provided by their sons and daughters have stepped into the predicament, and the potential land-deprived peasants urgently need to develop socialized old-age care mode. At the same time, results also indicated there are several key influencing factors on the intention of the old-age care of the potential land-deprived peasants such as peasants' cultural quality, the absence of government and peasants' traditional values.

Keywords: Urban planning area, Potential land-deprived peasants, Old-age care issue, Intention, Ya'an city

1. Introduction

During the second half of the twentieth century, urban sprawl, which is usually defined as the spreading of a city and its suburbs over rural land at the fringe of an urban area, has become a mass phenomenon throughout the Western world (Louw, 2008; Hanzl, 2010; Patacchini and Zenou, 2009). In recent years, the topic of urban sprawl has been extensively re-researched in the United States (Brueckner, 2000, 2001; Glaeser and Kahn, 2004; Nechyba and Walsh, 2004; Rosen, 2010). Urban sprawl in the United States has its origins in the flight to the suburbs that began in the 1950s, which was characterized by economic prosperity and a vast population growth (Resnik, 2010; Hanzl, 2010). People wanted to live outside of downtown to avoid traffic, noise, crime, and other problems, and to have homes with more square footage and yard space (Frumkin, 2002; Resnik, 2010). As a result, residents of sprawling cities tend to live in single-family homes and commute to work, school, or other activities by automobile (Frumkin, 2002; Resnik, 2010). Within less than twenty years, the U.S. population increased by 50 million people from 150 million in 1950 to 200 million in 1968 (Couch, Leontidou, and Arnstberg, 2007). For example, the Los Angeles area more than doubled from under 4 million to 8 million people in the same period (Hanzl, 2010). So, urban sprawl led to environment degradation, community isolation, social and economic inequities, and cultural homogeneity (Ndubisi, 2008). Especially, urban sprawl in United States has been seriously brought out the obesity and health problems (Plantinga, 2007).

Although suburbanization took also place in Europe during the post war period, its dimensions were by far less expansive than in the United States (Patacchini and Zenou, 2009). Nine European partners, including planners, sociologists, geographers and physicists, carried out the project of Europe urban sprawl by a wide range of

research methods related to quantitative modeling, qualitative examination and cultural approaches (Hanzl, 2010). The conclusion reached is that Europe urban sprawl is different from the United States, and increasingly created major impacts on the environment (via surface sealing, emissions by transport, and ecosystem fragmentation), on the social structure of an area (by segregation, lifestyle changes, and neglect of urban centers), and on the economy (via distributed production, land prices, and issues of scale) (Louw, 2008; Hanzl, 2010).

Just like the United States, Europe and other western developed countries, with rapid urbanization of China in recent years, urban sprawl have been one of important types of land use changes currently affecting China's cities, including small cities and metropolitan areas. In this process, a special peasant group has come into being in the urban planning area. Some years later, they will be deprived of their land, due to which their land, resources and villages will be replaced by urban landscape. As a result, they will be turned from peasants into land-deprived peasants and then into urban residents. Is the urbanization and socialization of such a special group successful? This issue is related not only to their future and fate but to the harmony of urban society and the final result of urban planning construction.

If their will and development fail to be attached importance to, this group may be sifted out gradually and finally be removed from our social structure (Sun, 2003). Social security and employment are key points restricting the urbanization of the potential land-deprived peasants in the urban planning area. As is shown in Jianxing Yu and Peiren Ding's research, on the issue of "what should be done in peasants' minds when government is expropriating their land", three items rank among the top: arranging for them the same social security as that in urban areas, improving land compensation standards and guaranteeing employment, which take up 69.2%, 59.6% and 40.4% of all respectively (Research Group for Rural Land Reform under the Urbanization, 2003). It is also displayed in a survey conducted by Mingfen Zhu among 225 land-deprived households that 207 of them have the desire more or less that endowment insurance can be offered for them when their land is deprived, accounting for 81.2% of all the surveyed households (Zhu, 2009).

As a result, investigations about the potential land-deprived peasants' intention on old-age care are of particular importance and special significance. They can be viewed neither as traditional peasants nor land-deprived ones, not to mention ordinary urban residents, which means that neither urban nor currently-reformed rural old-age care pattern is fit for them (Zhang and Liu, 2000; Wan, 2002; Geng and Lu, 2007; Yu and He, 2009; Zhu, 2009). This paper takes Ya'an City, Sichuan Province of China, as an example to conduct a complete and systematic investigation on the old-age care intention of these potential land-deprived peasants, which is of great importance for the development of rural old-age care system, the coordination of urban and rural areas as well as future construction and management of urban planning.

2. Study Area

Ya'an City is located in the western Sichuan Province of China, the upper reach of the Yangtze River, the transitional zone between Chengdu Plain and the Tibetan Plateau (Figure 1). Ya'an city is about 130 km away from Chengdu city of Sichuan capital though the national highway G5. Ya'an city is largely mild and humid greatly influenced by the Qionglai Mountains. With nearly 1700 millimeters of annual rainfall, known as a "rain city", Ya'an city is one of the rainiest areas in the same latitude of the world. Thanks to the favorable climatic conceptions, good resource and city environment, Ya'an city is encircled by mountains, the forest and the Qiongyi River flow through it so that the city came into being one of famous eco-cities and "China Excellent Tourism City". As the famous place discovered first giant panda in the world, Ya'an city is also the hometown and the "capital" of giant panda.

Urbanization in Ya'an city is lower than the national average. But with accelerating progress in rapid industrialization, since the late 1990s, Ya'an urbanization has been developing rapidly. Till the end of 2010, with the urban built-up area of 28.5 square kilometers, urbanized population of Ya'an city accounts for 34.62%, 16.16% up compared with 2000. In fact, the true urbanization level including the peasant workers who live in the city more than six months of one year is even higher than urbanization level of non-peasant population proportion in official statistics. According to Ya'an urban comprehensive planning toward to 2020, Ya'an city will reach the urbanization level of 60% in the end of planning period.

3. Data Accumulation and Processing

This investigation was conducted in Daxing Town of Ya'an City which is located in the core of the new zone of urban planning. After some years, with urbanization achieved, current rural land will be used for urban development. 4156 households were investigated in this area, who came from 53 groups in 8 villages. A ratio of 42:1 was preset for sample selection in order to confirm the number of investigated households allocated in each village and then further to peasant groups. After the investigated number was confirmed in each group, the whole

investigated region (group) will be investigated first mainly to observe population density and specific distribution. After that, the principle of random sampling and unexpected encountering sampling were combined to select investigated households. With the target peasants confirmed, authors and assistant investigators went to the fields or peasants' homes to have careful investigations and interviews, collecting 101 samples, all of which were valid. Among them, there were 46 male and 55 female interviewees, accounting for 45.5% and 54.4% respectively; in terms of age, 34.65% of them were below 50 years old and 65.35% were 50 or above; in the level of education, 66.3% of them had an educational level below primary school and 33.7% at secondary school or above; in per-capita income, 61.4% of them had only 1000 yuan or less, 29.7% of them had 1000 to 2000 yuan, 2.0% had 2000 to 3000 yuan and 6.9% had over 3000 yuan.

The adopted questionnaire was designed closely related to the topic of "the old-age care intention of potential land-deprived peasants" with easy questions which could be understood by these groups at different ages or levels of education as well as a reasonable order and combination of all questions. Before the real investigation, I even had a tested survey among 25 typical peasant households in Shunlu Village, Mujia Village and Qianjin Village in Daxing Town and employed the feedback from it to amend and perfect the questionnaire, hence forming the final one. The real questionnaire period lasted from January 2nd to March 18th 2008.

With the investigation data encoded, valued and input into the computer, SPSS was adopted to have statistical analysis on them, in which frequency statistics, descriptive statistics, the analysis on Kendall's tau-b rank correlation and cross contingency table analysis and so on were employed (Ruan, 2005).

4. Result and Analysis

4.1 Improved Recognition of Old-age Care Security among the Peasants in the Urban Planning Area

4.1.1 Rational Attitudes toward Old-age Care

First let's take a look at the ranking of basic contents in social security in terms of significance. As for the most significant one, 55.4% of the investigated peasants list basic living to the top while 25.7% choose medical security and 14.9% choose endowment insurance; for the second important place, 57.4% of them choose medical security while 26.7% and 9.9% of them turn to basic living and endowment security respectively; when it comes to the third place on the list, 51.5%, 13.9% and 8.9% of them choose endowment insurance, medical security and basic living respectively; most of them turn to elderly people's cultural entertainment for the fourth place and old-age education for the fifth. Obviously, material supply comes first in old-age care, hence leading to the top priority of basic living in which their future housing conditions are one focus; elderly people have poor health and are more liable to have diseases and therefore have great demands for medicare, hence leading to the importance of medical security; when these old-aged people's demands in basic living and medical health are fulfilled, they will desire for security at a higher level, which can be met by endowment insurance that provides them with steady financial support and greater satisfaction; with their satisfaction of material life, they begin to pursue enjoyment at the spiritual level, which provokes the necessity and possibility of cultural entertainment and old-age education.

As for individuals' focus, 57 peasants (53.3%) show solicitude for endowment insurance, 18 ones (16.8%) pay close attention to medical security while 14.0% and 15.9% of the investigated peasants turn to educational security and other aspects respectively.

As is shown above, these peasants are quite eager for old-age care. Due to the potential land deprivation, they have much greater interest in this issue compared with the peasants in other rural areas and ordinary urban residents. The loss of their land which is otherwise a steady income source means the loss of a steady financial source for their old-age life. Before the creation of a more desirable pattern for old-age care, their estimation on old-age care situation will have a direct impact on relevant decision-making.

4.1.2 Valued Socialized Pattern for Old-age Care

Land is what peasants rely on for steady income. However, with the implementation of urban planning, this financial source is being disintegrated. Besides, the former endowment pattern merely relying on offspring are confronted with difficulties, hence leading to the search for a supplementary method for old-age care. With the publicity under the help of some media such as TV and newspaper as well as the encouragement of local governments, a new method, socialized old-age care, is booming in prosperity nowadays.

When asked whether they agree that elderly people are covered by social endowment, 66.3% of the respondents turn to "yes" while 33.7% to "no". A majority of them hold the opinion that such a method helps to endow them with effective security as well as to lessen their children's burden. In the comparison between family support and social support, 30.7% put the latter before the former in significance while 14.9% view them as the same

important. Obviously, when faced with complicated situations, these potential land-deprived peasants' attention has been shifted from relying on family or offspring support to focusing on national or social old-age care, which is their only choice with the worsening situations of family support.

As an important channel for socialized old-age care which is influenced by government direction of public opinion and real situations, endowment insurance has been widely accepted. Seen from their intention on endowment insurance, 31.7% of the investigated are willing to be covered by social insurance, 4.0% are willing to be involved in commercial insurance and 23.8% think either is possible. It is also shown in our interviews that these peasants in the urban planning area have strong awareness of unexpected development and desire to have desirable security for their old-age life. Due to limited family support, endowment insurance seems to be the best choice for their future life. When asked about their willingness to join endowment insurance, 75.2% of the investigated peasants hold positive attitudes with only 24.8% giving a negative answer. There are two main reasons for that: on one hand, with their land deprived, peasants are eager for another way to take care of their old-age life and social security based on government actions serves as an ideal guarantee for their future; on the other hand, without their former steady income from the land, "free input" and "economic burden" in a certain period of time will bring about steady reward and guarantee, which also explains why these peasants prefer to have endowment insurance.

4.2 Developing the Children-support Pattern in Difficulties

4.2.1 Economic Level Restricting the Development of Family Support for Old-age Care

Old-age care, first of all, is a material supply process, due to which a family's economic level has a direct effect on the quality of old-age care. It is shown in the investigation that 61.4% of the surveyed rural households have a per capita net income of farmers less than 1,000 yuan (Chinese Renminbi), which can only sustain the most basic demand for a family to survive. As a result of low income, 44.6% of the surveyed households spend less than 1,000 yuan per person on old-age care, only fulfilling elderly people's basic living demands. With the expenditure on old-age care being an important factor related to medical security for elderly people, 33.6% of the surveyed households cannot afford expensive medical expenses, 82.1% think medical expenses are too high for them. Therefore, what comes first in significance for the aged is their health condition (51.85%), followed by basic living condition (22.22%) and health care (10.19%) and psychological soothing (7.41%). The peasants' low income in Daxing Town leads to their importance attached to the demands for the survival and development of the whole family as well as children's education, hence leaving old-age care aside.

4.2.2 Severely Insufficient Independent Support from Children

In Daxing Town, the traditional old-age care pattern in which children's support is relied on seems to be increasingly insufficient for the current situation. With the present economic conditions, is it possible for children to take up the old-age care mission all independently? 61.4% of the investigated peasants give a negative answer. Actually, most of the young laborers in the urban planning area are out in cities, leaving old people at home taking up agricultural production. 43.8% of the aged peasants in the rural area still take an active part in agricultural production due to their passion for field work but mainly to the necessity of their income from the land for making up for the insufficient support from their children. The reality is that children cannot afford their parents' retired life without labor while these old people's high-intensity labor may cause diseases which will increase their medical risks and their expenses on health care.

4.2.3 Children's Important Role in Future Old-age Care

As is shown in statistics, 46.5% of the investigated peasants put family support before social support in significance. Although Daxing in future will develop into an urban community and government will help the land-deprived peasants to solve their old-age care problems, the role of family cannot be neglected for future old-age care due to the importance of Chinese spiritual and traditional culture level. For their land deprived, 29.1% of the investigated households will still choose children's support. In the aspect of future capital source for old-age care, 43.6% choose the combination pattern of family and government, 33.7% choose the family source.

From the perspective of national policy as well as old-age care, family support plays an indispensable role. In spite of some possible reforms in the old-age care pattern in the future, elderly people are still liable to rely on their children psychologically. Therefore, it is safe to say that children support will still play an important role in old-age care in Daxing Town regardless of its future development.

4.3 Educational Level Becoming a Key Factor for Old-age Care Intention

The Kendall's tau-b rank correlation coefficient between educational level and the attention level to old-age care is 0.266 with the significance level assumed to be 0.01, the concomitant probability of statistics is 0.003, which

reflects an significant positive correlation between the two. Changes in educational level have led to great changes in peasants' evaluation on government's attention to old-age care. Those with secondary education level or above are 16% higher than those below secondary education level in their attention to this issue while 30% lower in the degree of lack of attention.

The Kendall's tau-b rank correlation coefficient between educational level and medicare sites is 0.244. With the significance level assumed to be 0.01, the concomitant probability of statistics is equal to or less than 0.01 (with the value of 0.008), which reflects an obvious positive correlation between the two. 82% of the peasants with lower educational level choose village clinics and county clinics while those with secondary or higher level of education may choose hospitals with better medical facilities. Village clinics and county hospitals are major medicare sites for rural population with lower compensation standards while the standards are much higher for the hospitals at the city level, leading to changes in the medicare ideology of peasants. Comparatively, those with higher educational level may abandon their traditional ideas about medicare prices to choose hospitals with better facilities.

Besides, educational level may indirectly influence peasants' intention on old-age care through its effect on income. The Kendall's tau-b rank correlation coefficient between educational level and per-capita income is 0.319. With the significance level assumed to be 0.01, the concomitant probability of statistics is equal to or less than 0.01 (with the value of 0.001), which reflects an significant positive correlation between the two. It can be concluded that the per-capita income of the investigated group is on the rise with the improvement of their educational level. 71.6% of the peasants with primary education or below have a per-capita income less than 1,000 yuan, 30% higher than that of the group with secondary education or above. Therefore, peasants' cultural quality exerts indirectly notable influences on the intention of old-age care though the intermediary of per-capita income.

4.4 Peasants' Low Confidence and High Expectation with Government

When evaluating local government's attention to the old-age care issue in Daxing Town with a five-grade marking system, 81.18% of the investigated peasants give 3 points or below, 36.63% of them give 2 points, 25.74% give 3 points, 17.82% give 1 point and even 1% give 0. It is obvious that these peasants are not satisfied with the current government's action, especially that related to old-age security. When asked about the defects lying in the current old-age care system in Daxing Town, 67.3% of the investigated peasants indicate that they have no idea about it, 16.83% express to the shortage of finance, 8.91% agree to incomplete institution and 6.93% point to imperfect system on old-age care regulations. Relevant reasons include local government's inadequate attention to such a special group as well as ineffective government publicity and insufficient knowledge about old-age care.

Without land, what changes may happen to elderly people's basic living and medical security? For this question, 54.5% think it is determined by government action, 29.70% think that the security level will decline while only 6.93% think that it will rise in the future. Meanwhile, peasants show high expectation with government for their old-age care since government action has a direct impact on their future life. For the question "what should be done by government to help peasants with their old-age care?", 41.7% choose subsistence allowance, 29.8% choose social security, 18.5% choose medical privilege, 3.6% choose new medicare project and 6.5% choose others. Obviously, when considering their old-age care, these peasants place living security to the top, which is followed by stable comprehensive social security and medical security.

4.5 Traditional Concepts Restricting the Development of Old-age Care

It is shown in the investigation that the peasants in the urban planning area are still confined to traditional ideas and concepts. Seen from their opinions on the idea of "raising children to prepare for old age", 32.4% agree that it should be sustained; 71.3% express that they are unwilling to be sent to the old-age apartments due to two reasons: first, they have children to take care of them; second, it is costly to live there and therefore no better than staying at home in the same circumstances of cost. In the aspect of physical examination frequency, 73.3% neglect the necessity of regular physical examinations for those aged people without symptoms. Actually, however, old people tend to have higher morbidity and greater difficulty in disease control. Therefore, physical examination is of particular importance for old people's health.

5. Conclusion

With the rapid development of China's urbanization and industrialization since 2000, urban expansion and sprawl is ongoing and will become a mass phenomenon in most of China just like western developed countries. Nowadays, more and more people have increasingly and closely concerned about the old-age care issues in the

process of China's urban development, especially for the potential land-deprived peasants in urban planning area of China. By means of 101 households' sampling survey in 53 peasant groups of 8 villages of the urban planning area of Ya'an City, it is found in this research that the following characteristics are displayed in the potential land-deprived peasants' intention on old-age care: (1) Influenced by the implementation of urban planning, local residents have urgent demands for old-age care, which is particularly shown in their panic for their loss of land and their worry about the security for their future old-age life. In the current situation, due to low family income and high medical prices, children's support for old-age care is sharply weakened. (2) Socialized old-age care has been widely accepted. Taking into consideration their unsteady old-age security after their loss of land, a lot of peasants choose to be covered by endowment insurance or other ways for their old-age life. Meanwhile, their eyes have been shifted from family support to that given by society or government. (3) According to Kendall's tau-b rank correlation analysis, educational level has become one of key factors for peasants' intention on old-age care. In addition to its direct influence, cultural quality also exerts indirect impacts due to its influence on family income. (4) In spite of peasants' poor confidence in government, they will lay expectation on government policies due to the great impact of local government on the livelihoods and old-aged welfare of land-deprived peasants, hence having greatly higher expectation about government.

Because of their great differences in resources and environment, different regions are expected to choose their special ways for urban planning, construction and management instead of following the same pattern. However, the conclusions drawn from this research can provide some important reference for urban planning and urban management of China's similar regions: (1) In future urban planning, public opinions should be followed to have participatory planning; rebuilding residential areas should be planned scientifically for these potential land-deprived peasants; some public service facilities are to be planned for this special group's old-age security. (2) When conducting urban management, this group's intention on old-age care should also be taken into consideration to enhance the security for their future and the policy system related to their removal and settling is to be perfected as soon as possible.

Acknowledgements

The authors wish to acknowledge research funding provided by National Social Science Foundation of China (09XJY030), and the financial support provided by Sichuan Agricultural University is gratefully acknowledged.

References

- Brueckner, J. (2000). Urban Sprawl: Diagnosis and Remedies. *International Regional Science Review*, 23(2), 160-171. <http://dx.doi.org/10.1177/016001700761012710>
- Brueckner, J. (2001). Urban Sprawl: Lessons from Urban Economics. *Wharton Papers on Urban Economic Affairs*, 65-97.
- Couch, C., Leontidou, L. & Arnstberg, K. (2007). Urban Sprawl in Europe: Landscapes, Land-use Change & Policy. Oxford, UK, Blackwell Publishing Ltd.
- Frumkin, H. (2002). Urban Sprawl and Public Health. *Public Health Rep*, 117(3), 201-217.
- Frumkin, H. (2005). Health, Equity, and the Built Environment. *Environ Health Perspect*, 113(5), 290-291. <http://dx.doi.org/10.1289/ehp.113-a290>
- Frumkin, H., Frank, L. & Jackson R. (2004). *Urban Sprawl and Public Health*. Washington DC: Island Press.
- Geng, Qingru & Lu, Yanjun. (2007). Current situation and Mode construction of Western China's Rural Old-age Care. *Journal of Xi'an Jiaotong University (Social Science)*, 27(2), 51-55.
- Glaeser, Edward L. & Kahn, Matthew E. (2004). *Sprawl and Urban Growth*, in: J.V. Henderson & J. F. Thisse (ed). Handbook of Regional and Urban Economics, Edition 1, Volume 4, Chapter 56, 2481-2527.
- Hanzl, M. (2010). Urban Sprawl in Europe: Landscapes, Land-use Change and Policy. *Planning Practice & Research*, 25(2), 273-274. <http://dx.doi.org/10.1080/02697451003740312>
- Louw, E. (2008). A Review of: "Urban Sprawl" in Europe: Landscape, Land-use Change & Policy. *European Journal of Housing Policy*, 8(4), 443-445. <http://dx.doi.org/10.1080/14616710802449794>
- Ndubisi, F. (2008). Sustainable Regionalism. *Landscape Journal*, 27(1), 51-68. <http://dx.doi.org/10.3368/lj.27.1.51>
- Patacchini, E. & Zenou, Y. (2009). Urban Sprawl in Europe. *Urban Affairs*, 10, 125-142.
- Plantinga, A. & Bernell, S. (2007). Can Urban Planning Reduce Obesity? The Role of Self-selection in Explaining the Link between Weight and Urban Sprawl. *Review of Agricultural Economics*, 29(3), 557-563.

<http://dx.doi.org/10.1111/j.1467-9353.2007.00370.x>

Plantinga, A. J. & Bernell, S. (2007). The Association Between Urban Sprawl and Obesity: Is It a Two-way Street. *Journal of Regional Science*, 47(5), 857-879. <http://dx.doi.org/10.1111/j.1467-9787.2007.00533.x>

Research Group for Rural Land Reform under the Urbanization. (2003). Status and prospects of peasants' living under the urbanization. *Journal of Ningbo CPC Party School*, 4, 19-26.

Resnik, D. B. (2010). Urban Sprawl, Smart Growth, and Deliberative Democracy. *American Journal of Public Health*, 100(10), 1852-1856. <http://dx.doi.org/10.2105/AJPH.2009.182501>

Rosen, C. M. (2010). Urban Sprawl Global Warming, and the Empire of Capital. *Business History Review*, 84(2), 427-429. <http://dx.doi.org/10.1017/S0007680500002907>

Ruan, Guihai. (2005). *Datum Statistics and Analysis*. Beijing: Peiking University Press.

Sun, Liping. (2003). *Rupture: China's Society since 1990s*. Beijing: Social Science Academic Press.

Thomas, J. N. & Randall, P. W. (2004). Urban Sprawl. *Journal of Economic Perspectives*, 18(4), 177-200. <http://dx.doi.org/10.1257/0895330042632681>

Wan, Zhongde. (2002). Construction and Forward Thinking on China's Rural Old-age Care Mode in 21st Century. *Ningxia Social Science*, 3, 33-35.

Yu, Li & He, Jinqi. (2009). Discussion on China's Rural Old-age Care way. *East China Economic Management*, 2, 15-17.

Zhang, Shiping & Liu, Lihua. (2000). History, Characteristic and Cause of Rural Old-age Care since the founding of P.R.China. *Journal of Demology*, 5, 51-55.

Zhu, Mingfen. (2009). Investigation and Countermeasure of Land-Deprived Peasants' Interest safeguard. *China Rural Economics*, 3, 65-70.

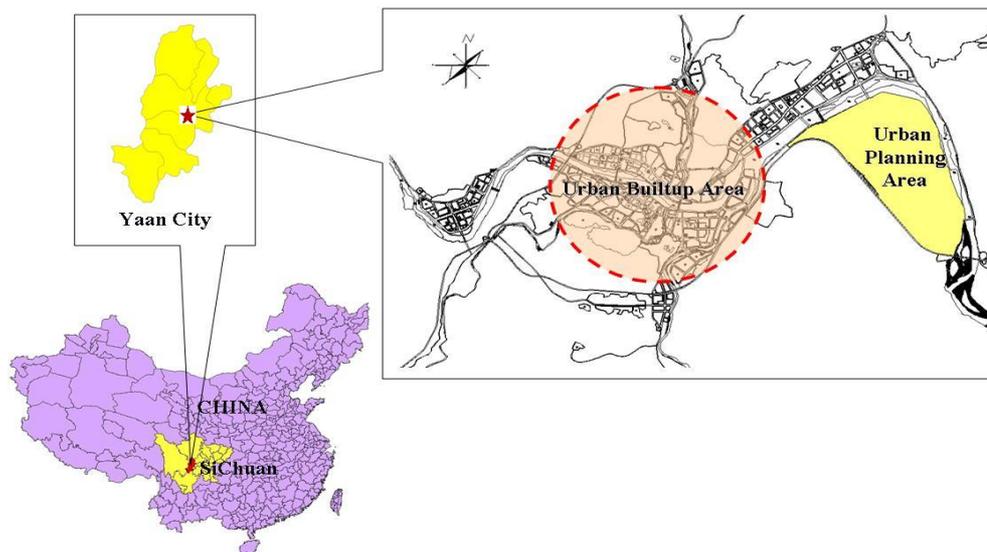


Figure 1. The location of Ya'an city